

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-12 are pending in the present application. Claims 1, 3 and 7 are amended by the present response. Support for amendments to the claims can be found in the disclosure as originally filed. Thus, no new matter is added.

In the outstanding Action, Claims 1 and 7 were objected to as including informalities; Claims 1-12 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement; Claims 1-12 were rejected under 35 U.S.C. §112, second paragraph, as indefinite; Claims 1-3, 5, 7-9 and 11 were rejected under 35 U.S.C. §103(a) as unpatentable over Nishi (U.S. Pat. No. 5,959,721); Claims 4 and 10 were rejected under 35 U.S.C. §103(a) as unpatentable over Nishi in view of Kawashima et al. (U.S. Pat. No. 5,124,562, herein “Kawashima”); and Claims 6 and 12 were rejected under 35 U.S.C. §103(a) as unpatentable over Nishi in view of Yamada et al. (U.S. Pat. No. 5,323,016, herein “Yamada”).

With respect to the objection to Claims 1 and 7 as including informalities, Claims 1 and 7 have been amended to overcome the objection. Specifically, Claims 1 and 7 have been amended to recite “projecting an inspecting light.” Accordingly, Applicants respectfully request that the objection to Claims 1 and 7 be withdrawn.

With respect to the rejection of Claims 1-12 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement, Applicants respectfully traverse this rejection. The outstanding Action asserts that the feature of “fixing the specimen surface to a reference level, while the servo driving is stopped” is not disclosed in the originally filed disclosure. Applicants respectfully traverse this assertion. Specifically, Applicants note that this feature is clearly disclosed, at least, on page 13 line 18 to page 14, line 23. Accordingly,

Applicants respectfully request that the rejection of Claims 1-12 under 35 U.S.C. §112, first paragraph be withdrawn.

With respect to the rejection of Claims 1-12 under 35 U.S.C. §112, second paragraph, as indefinite, Applicants respectfully traverse this rejection. Specifically, with respect to the term “in the direction of level,” Applicants respectfully submit that this term clearly denotes “up and down.” For example, on page 2, line 26 to page 3, line 1, the originally filed disclosure states that “the mask is moved up and down so as to make the mask level signal constant.” Moreover, the wording “to a reference level” clearly corresponds to the position of the stage, with the term “level” corresponding to height.

Nevertheless, in order to further prosecution, Applicants have amended Claims 1, 3 and 7 to clarify the features recited therein. Moreover, Claims 1 and 7 have been amended to ensure proper antecedent basis is provided for each feature recited therein.

Accordingly, Applicants respectfully request that the rejection of Claims 1-12 under 35 U.S.C. §112, second paragraph, be withdrawn.

Addressing now the rejection of Claims 1-3, 5, 7-9 and 11 under 35 U.S.C. §103(a) as unpatentable over Nishi, Applicants respectfully traverse this rejection.

Claim 1 recites,

A specimen surface level adjusting method used in an apparatus for inspecting a pattern on a surface of a specimen with a pellicle frame, wherein the apparatus comprises an optical system of inspecting the pattern on the basis of a detected image obtained by projecting an inspecting light onto the specimen surface and of scanning the specimen two-dimensionally, a moving mechanism for moving the specimen up and down while the optical system scans the specimen, an autofocus mechanism of focusing the optical system on the specimen surface by servo driving the moving mechanism on the basis of the intensity of reflected light resulting from level measuring light projected onto the specimen surface, the method comprising:

detecting the loss of the reflected light caused by the pellicle frame blocking out the level measuring light or the reflected light;

stopping the servo driving, if the loss of the reflected light is detected; and
fixing the specimen surface to a reference level while the servo driving is stopped.

Claim 7 recites similar features with regard to detecting the loss of the reflected light.

Nishi describes a projection exposure apparatus which exposes a photosensitive substrate with a pattern on a circular mask by projection through a projection optical system.

However, as is acknowledged on page 5 of the outstanding Action, Nishi does not describe or suggest detecting the loss of the reflected light caused by the pellicle frame blocking out the level measuring light or the reflected light, stopping the servo driving, if the loss of the reflected light is detected and fixing the specimen surface to a reference level while the servo driving is stopped.

Nevertheless, the outstanding Action asserts that “one can obviously achieve the claimed invention using the teachings though by Nishi i.e. the main stage movement, aligning the pellicle and stopping the servo based on the different in light (loss of light).” Applicants respectfully traverse this assertion as erroneous.

Specifically, the outstanding Action appears to confuse the terms “reticle” with “pellicle frame.” For instance, the pellicle frame is a frame to which a thin film (a pellicle) is adhered in order to prevent infinitesimal dust from adhering to the surface of the mask.¹ In contrast, a reticle is a type of photomask which is an opaque plate with holes or transparencies that allow light to pass through in a defined pattern. Moreover, the term “reticle frame” never appears in Nishi.

In addition, Nishi describes in col. 11, lines 11-12 that “L1 and L2 indicate **positions** at which the marks 29A, 29B on the reticle are detected by the respective sensors.” As is clear from this description, L1 and L2 do not indicate the intensity of light.

¹ See pages 1-3 of the originally filed disclosure.

Thus, Nishi never describes or suggests detecting the *loss of the reflected light caused by the pellicle frame blocking out the level measuring light or the reflected light.*

Thus, Applicants respectfully submit that Claims 1 and 7, and claims depending respectfully therefrom, patentably distinguish over Nishi.

Moreover, none of the further cited Kawashima and Yamada references cure the deficiencies of Nishii with regard to the above noted features of the claimed invention.

In addition, Applicants respectfully submit that Claims 2 and 8 patentably distinguish over Nishi, Kawashima and Yamada irrespective of these claims' dependence from Claims 1 and 7.

Specifically, Claims 2 and 8 recite that the measuring light is projected diagonally onto the specimen surface. The outstanding Action acknowledges on page 7 that Nishi does not describe or suggest this feature but instead asserts that this feature would have been a "design choice." Applicants respectfully traverse this assertion.

Specifically, "design choice" is not a proper rationale on which to base an obviousness rejection in the present circumstances. See *In re Chu*, 66 F.3d 292, 36 USPQ2d 1089 (Fed. Cir. 1995) and *In re Gal*, 980 F.2d 717, 25 USPQ2d 1076 (Fed. Cir. 1992). For instance, the court has held that a "finding of 'obvious design choice' *[is] precluded where the claimed structure and the function it performs are different from the prior art*" *Chu*, 66 F.3d at 299, 36 USPQ2d at 1095, citing *In re Gal*, 980 F.2d 717, 719, 25 USPQ2d 1076, 1078 (Fed. Cir. 1992) (emphasis added).

In the present case the structure of the claimed invention is clearly different from the cited references. The burden is on the Examiner to provide evidence of why the features that are missing from the cited reference would be obvious to one skilled in the art. In the present case, no such evidence is provided.

Accordingly, Applicants respectfully submit that Claims 2 and 8 patentably distinguish over Nishi, Kawashima and Yamada considered individually or in combination.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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